



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,427	09/30/1998	AMIR S. AFSHARY	042390.P5980	6655

7590

03/22/2006

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER

HUYNH, SON P

ART UNIT	PAPER NUMBER
----------	--------------

2623

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/164,427	AFSHARY ET AL.	
	Examiner	Art Unit	
	Son P. Huynh	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,9,10,12,25-28,30,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,9,10,12,25-28,30,32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/03/2006 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-5, 7, 9-12, 25-28, 30-33 have been considered but are moot in view of the new ground(s) of rejection.

Claims 6, 8, 11, 13-24, 29 and 31 have been cancelled.

Claim Objections

3. Claims 1-5, 7, 9, 10, 12 are objected to because of the following informalities:

Art Unit: 2611

Claim 1, lines 10-11 recites the limitation "frequency greater between 1000 MHz and 2000 MHz" should be changed to – frequency between 1000 MHz and 2000 MHz.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1- 5, 7, 9-10, 12, 25-28, 30, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carhart (US 6,622,304 B1).

Regarding claim 1, Carhart teaches a digital coaxial cable LAN (figure 5) for communicating data between clients (21,22) of the cable LAN, the cable LAN comprising:

a plurality of clients (21,22 –figure 5);

a plurality of universal client interface adapters (26,27 –figure 5), one universal client interface adapter (27) in communication with at least one client (e.g. TV 22) and in communication with at least one other universal client interface adapter (26) (figure 5 or figure 6; col. 11, lines 9-56);

Art Unit: 2611

at least one coaxial cable (23 –figure 5) coupled between a pair of universal client interface adapters (26 and 27), the at least one coaxial cable having an operating frequency spectrum, the operating frequency spectrum having at least a first portion (frequency band f_1 from a nearly CATV system into home – col. 9, lines 1-14) and a second portion, the second portion operating at a frequency greater than 860 MHz (frequency band f_2 and f_3 –col. 11, lines 10-41); and

at least one carrier modulated digital signal having a signal operating frequency that occupies the second portion of the operating frequency spectrum of the coaxial cable, the at least one carrier modulated digital signal transmitted in the coaxial cable coupled between the pair of universal client interface adapters (col. 11, lines 7-41; col. 13, line 50-col. 14, lines 19-67). However, Carhart does not specifically disclose a frequency between 1000 MHz and 2000 MHz with a center frequency about 1350 MHz.

The skilled engineer can select any operating frequency range above 860 MHz (and as a result, with any value of center frequency since center frequency depends on operating frequency range (lower and upper frequencies)) to transmit signals on a coaxial cable in compliance with FCC regulations but limited to the capability and characteristics of the transmission medium and devices communicating on the medium. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Carhart's system to include the frequency range to be of any values such as between 1000 MHz and 2000 MHz, with the carrier modulated digital signal having a center frequency of any value (based on values of the operating frequency range) such as 1350 MHz so long as the frequency desired is in compliance

Art Unit: 2611

with FCC regulations but limited to the capability and/or characteristics of the transmission medium and devices communicating on the medium.

Regarding claim 2, Carhart additionally teaches at least one of the plurality of universal client interface adapters is integrated into a client of the cable LAN (e.g. the interface 26 is integrated into PC 21 of in home network 20 – figure 5).

Regarding claim 3, Carhart further teaches the at least one carrier modulated digital signal is an in-home signal (signal transmitted in f1 and f2 bands – col. 11, lines 10-41) and the coaxial cable (23) is tapped off of a public cable network (cable network 24- figure 5).

Regarding claim 4, Carhart additionally teaches a low pass filter (30 – figures 2-3) coupled upstream of the in home signal (col. 9, lines 35-46).

Regarding claim 5, Carhart further teaches the low pass filter having a cut off frequency less than 1000 MHz (low pass filter 30 having a cut off frequency of 750MHz – col. 9, lines 35-42).

Regarding claim 7, Carhart additionally teaches the at least one carrier modulated digital signal is an in home signal (signals transmitted in f2 and f3 band in the in home network – col. 11, lines 8-45), the cable LAN (in home network) further comprising a low

Art Unit: 2611

pass filter (30) coupled upstream of the in home signal to a public cable network (24) – see figures 2-3), wherein the carrier modulated digital signal is generated downstream of the low pass filter (generated by interface 26 downstream of LPF 30 – figures 2-3, 5 and col. 11, lines 8-41).

Regarding claim 9, Carhart further discloses the frequency is greater than 860 MHz (col. 11, lines 10-40). However, Carhart does not specifically disclose the operating frequency is greater than appropriately 1000 MHz.

The skilled engineer can select any operating frequency above 860 MHz to transmit signals on a coaxial cable in compliance with FCC regulations but limited to the capability and characteristics of the transmission medium and devices communicating on the medium. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Carhart's system to include the frequency to be of any value such as 1000 or greater so long as the frequency desired is in compliance with FCC regulations but limited to the capability and/or characteristics of the transmission medium and devices communicating on the medium.

Regarding claim 10, Carhart teaches a cable LAN as discussed in the rejection of claim 9. Carhart further discloses the carrier modulated digital signal operating frequency is greater than 860 MHz (col. 11, lines 10-40). However, Carhart does not specifically disclose the operating frequency is between 1000 MHz and 2000 MHz.

The skilled engineer can select any operating frequency in any range to transmit signals on a coaxial cable in compliance with FCC regulations but limited to the capability and characteristics of the transmission medium and devices communicating on the medium. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Carhart's system to include the frequency to be of any value of range such as between 1000 MHz and 2000 MHz so long as the frequency desired is in compliance with FCC regulations but limited to the capability and/or characteristics of the transmission medium and devices communicating on the medium.

Regarding claim 12, Carhart further teaches the "signal operating frequency" has a bandwidth of at least 5 MHz (col. 1, lines 62-65).

Regarding claim 25, Carhart discloses a method for communicating data between a first universal client interface adapter (26) and a second universal client interface adapter (27) coupled by a coaxial cable (23) – figure 5, the method comprising:
receiving digitized data in the universal client interface adapter (26) from a client (21) – figure 5 and col. 11, lines 8-32);
processing the data within the first client interface adapter (26) into a modulated signal having a signal operating frequency that is greater than 860 MHz (col. 11, lines 8-32);
and

Art Unit: 2611

communicating the modulated signal from the first universal client interface adapter (26) to the second universal client interface adapter (27) through coaxial cable (23) – col. 11, lines 8-41; col. 13, line 12, lines 24-56 and figure 5. However, Carhart does not specifically disclose a frequency is between 1000 MHz and 2000 MHz with a center frequency about 1350 MHz.

The skilled engineer can select any operating frequency range above 860 MHz (as a result, with any value of center frequency since the center frequency depends on the operating frequency range (lower and upper frequencies)) to transmit signals on a coaxial cable in compliance with FCC regulations but limited to the capability and characteristics of the transmission medium and devices communicating on the medium. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Carhart's system to include the frequency range to be of any values such as between 1000 MHz and 2000 MHz, with center frequency of any value, based on the operating frequency range, such as 1350 MHz so long as the frequency desired is in compliance with FCC regulations but limited to the capability and/or characteristics of the transmission medium and devices communicating on the medium.

Regarding claim 26, Carhart further teaches:

modulating the digitized data into an analog wave form (NTSC video from, PAL format, etc. – col. 11, lines 8-32; col. 12, lines 25-45);

converting the modulated data into a analog signal having an intermediate (col. 11, lines 8-32; col. 12, lines 25-56);

increasing the intermediate frequency to a frequency (f_2) that is greater than the signal cut off frequency (f_1) – col. 11, lines 8-32; col. 12, lines 40-50). Carhart further discloses the video signal is next transmitted via a diplex filter 75 out of the port 700 onto the attached coaxial cable 23 (col. 12, lines 50-56 and figure 7). Necessarily, the power of the signal is amplified to transmit the video signal.

Regarding claim 27, the additional limitation as claimed corresponds to the additional limitation as claimed in claim 10, and are analyzed as discussed with respect to the rejection of claim 10.

Regarding claim 28, the limitations of a cable LAN as claimed correspond to the limitations of method as claimed in claim 25 and are analyzed as discussed in the rejection of claim 25.

Regarding claims 30 and 32, the additional limitations as claimed corresponds to the additional limitations as claimed in claims 10, 12, and are analyzed as discussed with respect to the rejection of claims 10, 12.

Regarding claim 33, Carhart further teaches the normal coaxial cable system transmits signals external to the cable LAN (see figures 5, col. 9, line 60-col. 10, line 2).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPH
March 7, 2006


HAITRAN
PRIMARY EXAMINER